 Notice of Allowability	Application No.	Applicant(s)	
	10/705,998	MA ET AL.	
	Examiner	Art Unit	
	Sherry L Estremsky	3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed November 12, 2003.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☒ The drawings filed on 12 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1-12-04</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

To improve the form of the abstract and to correct an obvious typographical error, the application has been amended as follows:

in the abstract, lines 1-2, "is disclosed, which" was deleted;
in claim 1, line 10, "shaft" was changed to --shafts--.

2. The following is an examiner's statement of reasons for allowance:

No reference nor combination of references was found which teaches a transmission mechanism of an automotive vehicle with a differential mechanism including left and right side bevel gears, a gear and a dual tandem gear mounted on a shaft passing through the differential mechanism, and two rear wheel output shafts, wherein a gear is mounted on each of the rear wheel output shafts, the gears being engaged with the left and right side bevel gears, and two front wheel output shafts are removably connected with the two rear wheel output shafts.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent 1,480,856 (Enochs) January 1924 - discloses a caseless differential with one bevel side gear meshing with a gear on a rear wheel output shaft and another bevel side gear meshing with a gear on a second rear wheel output shaft which is parallel to the first. A shaft passing through the differential includes a dual tandem gear and an additional gear.

U. S. Patent 1,742,744 (Wyman) January 1930 - discloses a caseless differential with one bevel side gear meshing with a gear on a rear wheel output shaft and another bevel side gear meshing with a gear on a second rear wheel output shaft.

U. S. Patent 2,242,605 (Casner) May 1941 - discloses a caseless differential with one bevel side gear meshing with a gear on a rear wheel output shaft and another bevel side gear meshing with a gear on a second rear wheel output shaft.

U. S. Patent 2,537,060 (Keese) January 1951 - discloses a caseless differential with one bevel side gear meshing with a gear on a rear wheel output shaft and another bevel side gear meshing with a gear on a second rear wheel output shaft. The shaft that provides input to (but does not pass through) the differential includes dual tandem gears with which sliding gears selectively mesh.

U. S. Patent 2,674,892 (Keese et al.) April 1954 - discloses a caseless differential with one bevel side gear meshing with a gear on a rear wheel output shaft and another bevel side gear meshing with a gear on a second rear wheel output shaft. The shaft that provides input to (but does not pass through) the differential includes dual tandem gears with which sliding gears selectively mesh.

Art Unit: 3681

U. S. Patent 4,299,140 (Kako et al.) November 1981 - discloses a four-wheel drive transfer case with a caseless differential having a shaft supplying input that passes through the differential.


U. S. Patent 6,843,748 (Ma et al.) January 2005 - discloses a transmission and differential for a four-wheel drive vehicle. Various gears are mounted on shafts passing into the differential, including a dual tandem gear. A sliding gear on a propeller shaft includes an inner gear and an outer gear.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherry L Estremsky whose telephone number is (703) 308-2164. The examiner can normally be reached on Tuesday and Friday from 7:30 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLE


SHERRY ESTREMSKY
PRIMARY EXAMINER
AU3681 2-25-05